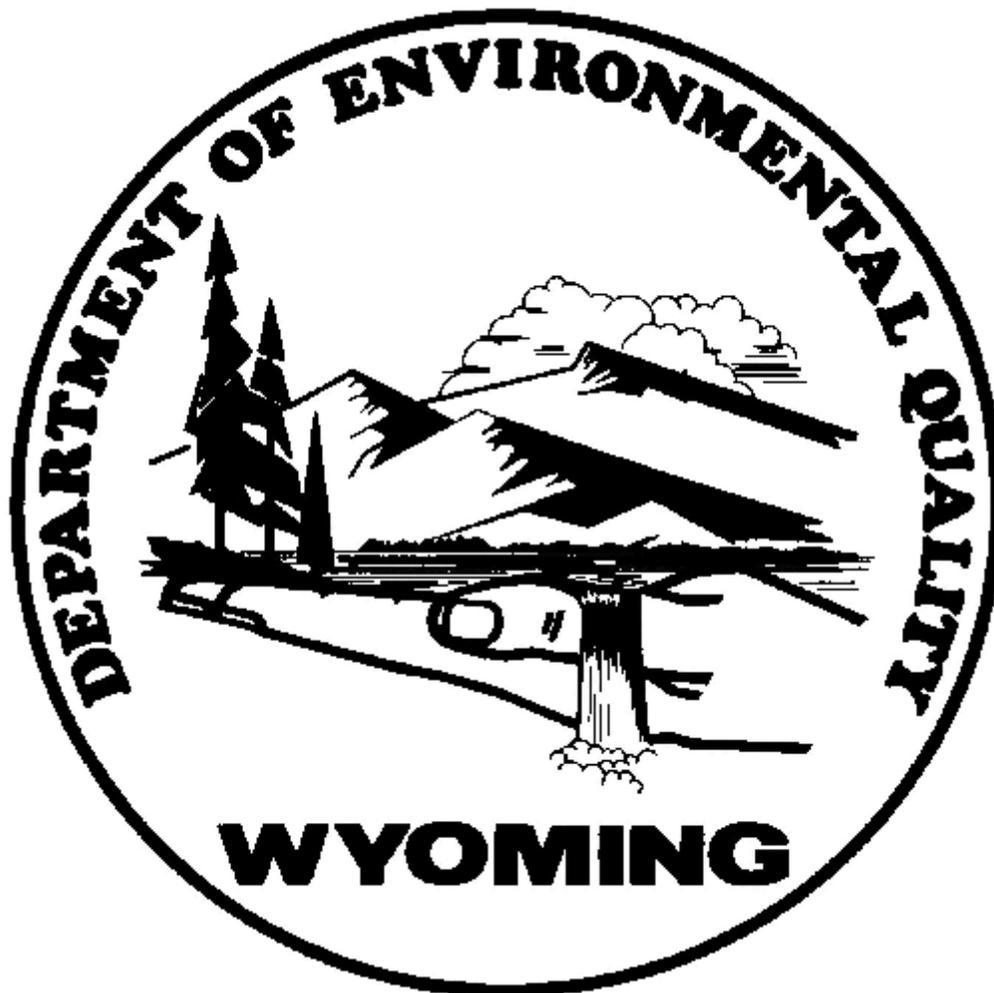


**DEPARTMENT OF ENVIRONMENTAL QUALITY
LAND QUALITY DIVISION**



GUIDELINE NO. 6

**NONCOAL;
APPLICATION FOR A "PERMIT TO MINE"
OR AN "AMENDMENT"**

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INTRODUCTION

This document is a guideline only. Its contents are not to be interpreted by applicants or DEQ staff as mandatory. Its preparation is the result of numerous requests from applicants who expressed a need for a check-list to assist them in preparation of a comprehensive initial application containing all required information. The design of this guideline is basic to application requirements of an average large-scale surface mine. As such, more or less information may be required depending on the specific operation. Separate guidelines are available for small operators, bentonite miners, and in-situ operations. This guideline is subject to change.

Prior to resource inventory or development of a mining and reclamation plan an applicant should review the following documents which can be obtained from the Land Quality Division upon request:

1. Wyoming Environmental Quality Act.
2. Land Quality Noncoal Rules and Regulations and revisions.
3. Land Quality guidelines:
 - No. 1 - Soil and Overburden.
 - No. 2 - Premining and Post-mining Vegetation Inventory.
 - No. 3 - Radiological Survey.
 - No. 5 - Terrestrial Wildlife Resource Assessment.
 - No. 8 - Hydrology.
 - No. 10 - Guideline for Fencing.
 - No. 11 - Cultural and Paleontological Resources.
 - No. 12 - Reclamation Performance Bond Calculations.
 - No. 13 - Sediment Ponds.
 - No. 15 - Alternate Sediment Control Measures.
4. State of Wyoming - BLM Memorandum of Understanding (for the mining of federal minerals on federal land covered by 43 CFR 3600 regulations).

Note: For information pertaining to the permitting of coal operations, see Guideline No. 6A.

The application should consist of two distinct parts. The first part is the adjudication file. Submit this part in loose form. This file contains important documents such as the "Permit to Mine" and "License to Mine" forms, Bonds, Notification and Consent forms, etc. The second part is the application supporting information (***Baseline information, Mine Plan and Reclamation Plan***) which contains information requested by Sections (vii) and (xiii) of Form 1 (Application for a Permit to Mine).

The data for the second part should be submitted in loose leaf 3 ring binders. This will allow easy substitution of any pages if revisions or additions are required. Again, data for the adjudication file should be submitted in a loose form and not be bound in the supporting information binders. The application should be on 8½ x 11 inch paper with standard margins and unique page numbers on all pages (unique page numbering meaning that for each section (e.g., Mine Plan) or Appendix, each page has a different page designation which has prefix identifying the section of the permit in which the page belongs). For example, page 1 of Appendix D-5 is identified as D5-1. Unique page numbering is essential for future permit revisions and in the event that individual pages are separated and lost from the permit binders. The paper should be about 20 pounds and of good quality. All figures and tables larger than 8½ x 11 inches should be folded to fit into the application and should be physically attached to the appropriate location in the application. All figures and tables should be uniquely numbered and referenced in the text. There must be Table of Contents(s) for both the Adjudication File and the Supporting Information.

Parts I, II, III, and IV of this guideline outline the order and basic items that should be included in the adjudication file and supporting information document. Part V outlines map and aerial photo requirements and Part VI includes general information.

I. ADJUDICATION FILE

A. Form 1

1. Permit to Mine Application. Affix corporate seal.

B. Form 3

1. License to Mine Application (Not required for amendments). Affix corporate seal.

C. Reclamation Bond

1. Original execution of bond and Power of Attorney. Cash, Federally Insured Renewable Certificate of Deposit, Government Securities and/or requirements of LQD Noncoal Rules and Regulations, Chapter 6, for self-bonding, can be submitted in lieu of a surety bond. If a personal or company check is submitted as a cash bond, three weeks waiting is required to assure that the check will be paid by the bank. The permit cannot be approved until the check has cleared the bank. To avoid any delay in approval, a certified or cashiers check should be used. It is wise to investigate with surety companies the time necessary to process a bond. The bond must be approved by the Attorney General's Office and LQD prior to approval of the mining permit.

Note: For minerals covered by the State of Wyoming - BLM Memorandum of Understanding and the 43 CFR 3600 regulations where the surface and mineral ownership is "federal" (BLM) the applicant must provide two copies of the application. Bonds other than cash bonds must be made payable to the Wyoming Department of Environmental Quality and U.S. Secretary of the Interior. Corporate surety bonds must be executed on the Land Quality State - BLM bond form. Cash bonds (checks, etc.) must be payable to only the Department of Environmental Quality.

- D. Landowner Consent** - If the applicant proposes to affect any land which lies within 300 feet of an existing occupied dwelling, home, public building, school, church, community or institutional building, park or cemetery, then written consent of said landowners must be obtained and placed in the permit application. W.S. 35-11-406(m)(viii) provides that the director may deny a mining permit application unless consent is obtained.

E. Appendix A (For lands within the permit area)

1. List of names and last known addresses of:
 - a. Owners of record of surface rights within permit area.
 - b. Owners of record of mineral rights within permit area.

2. Maps showing locations of ownerships in 1.a. and 1.b. above.

F. Appendix B (For lands adjacent to the permit area)

1. List of names and last known addresses of owners of record of surface rights of lands immediately adjacent to the proposed permit area and for any other persons having a valid legal estate of record within one-half (1/2) mile of the permit area.
2. Maps showing the locations of the ownerships in 1. above.

G. Appendix C

1. Tabulation of lands in the proposed permit area by legal subdivision, section, township, range, county, and municipal corporation, if any, and number of acres for each entry listed. If a bearing and distance description is used, it must be presented in either quadrant bearings or azimuths with horizontal distances. The number of acres in each bearing and distance description must be listed.

Note: If mining claims are utilized as the permit boundary, list each claim or series of claims with associated legal description and computed acreage.

2. Separate tabulation of lands in the proposed permit area where no right to mine is claimed with the number of acres for each entry.
3. Tabulation of lands which are located within other permit areas and a copy of the agreement with the other permittee(s).
4. An original Geological Survey topographic map, clearly outlining and identifying the lands to be within the proposed permit area. Photo copies or other similar copies are not acceptable unless prior approval is obtained from the Land Quality Division.

H. Appendix E - A map or maps with the boundary of the proposed permit area clearly outlined and identified showing:

1. Lands to be affected by mining.
2. Drainage area within and surrounding the proposed permit area.
3. Location and names, where known, of all roads, railroads, public or private rights-of-way and easements, utility lines, buildings, lakes, streams, creeks, springs, and other surface water courses, oil wells, gas wells, and water wells.
4. Outline of the probable limits of all areas previously disturbed or to be disturbed by underground or surface mining, whether active or inactive, on or immediately adjacent to the proposed permit area.

I. Proof of Publication - Land Quality Division will provide publication notice format. Publication and notification is not to begin until written consent from the Land Quality Division has been received.

- J. Proof of Notice** will now consist of the affidavit of publication executed by the newspaper.
- K. Proof of Filing** will continue to consist of an affidavit of filing from the County Clerk.
- L. Proof of Notification** shall be sent to all surface owners of record of the land within the permit area, surface owners of record of immediately adjacent lands, surface owners within ½ mile of the proposed mining site, and a copy of the Mine Plan map sent to the Wyoming Oil and Gas Commission. Such proof consists of a notarized “Affidavit of Notice,” the format for which is included with the Second (Final) Public Notice Format.
- M. Written verification of City or County** (appropriate zoning or planning department) approval for the mining operation (if affecting new lands).

II. APPENDIX D - DESCRIPTION OF THE LAND (Permit to Mine application, Form 1, Section (VII))

A. Appendix D-1 - Land Use

- 1. Past use of land within permit area for last twenty (20) years, if known.
- 2. Present use of land within permit area. If there are two or more neighboring and different land uses, the location and extent of each should be shown on a premining land use map.
- 3. Aerial photo of proposed permit area (if available).

B. Appendix D-2 - Brief History of the Area

C. Appendix D-3 - Archaeological and Paleontological Resources

- 1. Surveys.
- 2. Clearances.

Note: Archaeological investigation should be filed in a separate, properly marked 3-ring binder.

D. Appendix D-4 - Climatology

- 1. Meteorological data.
- 2. Air Quality Permit.
- 3. Discussion.

E. Appendix D-5 - Topography, Geology, and Overburden Assessment (See Guideline No. 1)

- 1. Premining topographic slope conditions (slope measurements) with map.
- 2. Geologic stratigraphy and structure.

3. Geologic cross sections for pit area(s).
4. Qualitative and quantitative overburden analyses.
 - a. Locate overburden test holes (drill or core holes from which samples are collected for laboratory analyses) on a topographic map and on the geological cross sections, The topographic map should also be utilized as a geologic cross section key.
 - b. Geologist's log for each overburden test hole.
 - c. Overburden sampling and analytical methodology.
 - d. Analytical results.
 - e. Evaluation and summary.

F. Appendix D-6 - Hydrology (See Guideline No. 8).

1. Groundwater.
 - a. Geologic setting.
 - b. Aquifer properties.
 - c. Piezometric contour maps of affected aquifer(s).
 - d. Quality of groundwater.
 - e. Monitoring program with map (premining, mining, post-mining).
 - f. Identify and locate groundwater recharge and discharge areas.
2. Surface Water.
 - a. Drainage basin description with map.
 - b. Surface runoff flood estimates.
 - c. Surface water quality including sediment loads.
 - d. Channel geometry.
 - e. Monitoring program with map (premining, mining, post-mining).
 - f. Perspective of stream channels in relation to the fluvial system.
3. Water rights.
 - a. List and map of surface water rights inside and within one-half (½) mile of the permit area boundary.
 - b. For any stream leaving the permit area, list and map surface water rights for a distance of three (3) miles downstream.
 - c. List of water wells inside and within three (3) miles of permit area boundary and illustrate on a map all well locations inside and within one-half (½) mile of the permit area boundary.

G. Appendix D-7 - Soil Assessment (see Guideline No. 1).

1. Soil inventory and suitability map with soil units and affected lands clearly outlined and identified.
2. Soil mapping unit and profile description.
3. Qualitative soil analyses.

- a. Sampling methodology and summary of analytical results.
 - b. Analytical results.
4. Quantitative topsoil analyses.
- a. Evaluation of soil resource for topsoiling purposes.
 - b. Quantities and characteristics of soil yield per affected area (noncontiguous areas estimated separately).
 - c. Soil stripping depth map for affected lands.
5. Summary and discussion of baseline soil inventory.
6. Field procedures which will be used to estimate actual stripping depths.

H. Appendix D-8 - Vegetation Inventory (see Guideline No. 2).

1. Table of Contents - A summary of the major entries, including list of figures, tables, and maps.
2. Introduction - A description of the location and general features of the permit area and the personnel (or firm) conducting the baseline inventory.
3. Methods - A clear, concise description of all procedures used in the baseline inventory, which includes:
 - a. Delineation and mapping of vegetation types and other land units.
 - b. General sampling design for the permit area.
 - i. Selection of sample points
 - ii. Plot size and shape, transect characteristics, etc.
 - iii. Specific calendar dates of all sampling
 - c. General sampling design for the Control Areas (CONAs) or Reference Areas (REFAs).
 - d. Establishment, marking and management of CONAs or REFAs.
 - e. Evaluation of sample adequacy.
 - f. Compilation of a species list(s) by vegetation community type.
4. Results and discussion - A clear, organized presentation and interpretation of the vegetation data, to include:
 - a. Description of the Vegetation Map and each vegetation type or other land unit.
 - b. Description of each CONA or REFA and discussion of its representative nature.
 - c. Tabular summary of the areal extent of each mapping unit and acreage affected by mining (see Table 1, Appendix V of Guideline No. 2).
 - d. Summarized vegetation parameters of the permit area (see Tables 2 and 5, Appendix V of Guideline No. 2).
 - e. Summarized vegetation parameters for the CONAs (see Tables 3 and 5, Appendix V of Guideline No. 2).

- f. Comparison of vegetation data between each vegetation type and its representative CONA (see Table 3, Appendix V of Guideline No. 2).
- g. Evaluation of sample adequacy for each vegetation type and its representative CONA (see Table 4, Appendix V of Guideline No. 2).
- h. Species list, selenium indicators, species of special concern and noxious (designated) or declared weeds (see Appendices I, III and IV of Guideline No. 2).

5. Literature Cited.

6. Raw Data.

I. Appendix D-9 - Wildlife (see Guideline No. 5)

- 1. Description of potential and actual faunal distribution on permit area with map.
- 2. Habitat affinity of animal on-site.
- 3. Identification of unique habitat types on-site with map.
- 4. Occurrence of threatened or endangered species or eagles on or within two (2) miles of the permit area.
- 5. Changes in hunting and fishing access to public lands during the life of the mine.
- 6. Wildlife impacts, short-term and long-term, resulting from the mining operation.
- 7. Summary and discussion.

J. Appendix D-10 - Wetlands

- 1. Provide a copy of National Wetlands Inventory (NWI) map, with permit area and mining areas delineated.
- 2. If potential wetlands do not exist in permit area, no further information is required.
- 3. If potential wetlands exist in the permit area, identify each wetland type and provide a brief description of each wetland type. No further information is required if the wetland is not within the areas to be disturbed by mining or mining-related activity.
- 4. If potential wetlands exist within areas to be disturbed by mining or mining-related activity, contact with the United States Army Corps Of Engineers (USACE) is required (copies of correspondence must be included with Appendix D-10). A more detailed ground investigation and field delineation of wetlands may be required. A mitigation plan for replacement of wetlands (if required by USACE) and inclusion of such plan in Reclamation Plan discussion.

K. Appendix D-11 - Premining Radiological Assessment for Uranium and Phosphate Mines (see Guideline No. 3). **For Uranium Mines Only.**

1. Natural radioactive background.
 - a. Description of methods.
 - b. Background results for lands to be affected.
2. Overburden radiochemistry. Discussions of sampling methodology and presentation of analytical results should be included in Appendix "D-5" and cross referenced here.
3. Summary of results.

III. MINE PLAN

A. General description of mining operation.

1. Type of mine.
2. Life of mine.
3. Equipment list (include types and numbers).
4. Nature of ore and estimate of reserves for life of mine.
5. Existing underground mines (locate on maps and address effects).
6. Protection of other resources (oil, gas, groundwater, other minerals, etc).
7. Mine facilities design criteria and construction methods and schedule discussed and mapped in relation to the Mine Plan. Description of, and a map depicting the following:
 - a. Buildings, processing plants and other facilities.
 - b. Access and haul roads.
 - c. Power transmission and communication lines.
 - d. Sedimentation and treatment ponds.
 - e. Mill and tailings disposal site.
 - f. Hydraulic diversions and retention systems, temporary and permanent.
 - g. Solid waste disposal.
 - h. Railroads and conveyors.
 - i. Storage and/or stockpile sites.
 - j. Access control features (fences, etc).
8. Auger mining.
 - a. Location and diameter of auger holes, depth to be drilled, and estimated percentage of recovery.
9. Underground mine.
 - a. Planned mine layout for life of mine including location and dimensions of shafts, slopes, drifts,

crosscuts, rooms, haulage ways, entries, and barrier pillars.

B. Mining Method and Schedule

1. Topsoil.
 - a. Stripping and handling techniques (stockpiling and/or haulback).
 - b. Quantity expected to be stockpiled per stockpile(s) (topsoil stockpiles located in mine sequence map).
 - c. Topsoil stockpile conservation plan.
2. Mine pit excavation, backfilling, and contouring.
 - a. Methods of pit excavation and pit backfilling.
 - b. Location and engineering of spoil piles to be located outside the pit boundaries. Discuss longevity of piles.
 - c. Disposal, treatment or covering of combustible, toxic, acid forming, or radioactive materials which may retard vegetative growth as identified in Appendix "D-5."
 - d. Compaction of backfilled material or material placed in spoil piles to prevent leaching and upward movement of toxic substances, provide stability, and prevent subsidence.
 - e. For uranium mines, destiny of secondary spoil (internal wastes) and mineralized material (low grade ore).
3. Commodity (ore or mineral).
 - a. Removal process.
 - b. Handling (preparation, refining, shipping).
4. Mining sequence.
 - a. Mine advance, by year, for life of mine.
 - b. Mine sequence map.

C. Mining hydrology (see Guideline No. 8)

1. Surface drainage plan during mining (maps, designs, and hydraulic properties).
2. Water treatment plans.
3. Quantity and quality of groundwater discharged into mine pit at various stages during mining. Show methods, calculations and numbers used to arrive at discharge estimates. Describe plans for placement and use of water pumped from the mine.
4. Statement of source, quality, and quantity of water, if any, to be used in the mining and reclamation operations.
5. Design details for sediment ponds and treatment systems.
6. Operational monitoring systems for surface and ground waters.
7. Statement of areas and rates of groundwater recharge.
8. Discussion of potential impacts to surface and ground waters and other water resources from mining and mining-related activity. Plan to mitigate such impacts during mining. Discussion of dewatering (*if applicable*) effects on and off site.

D. Refuse disposal.

1. Plans for the disposal of waste materials which may result from coal preparation plants, municipal wastes, or solid wastes which may be used as fill material, etc.

E. Public Nuisance and Safety

1. As required by W.S. § 35-11-406(b)(xiii), describe the procedures proposed to avoid constituting a public nuisance, endangering the public safety, human or animal life, property, wildlife and plant life in or adjacent to the permit area including a program of fencing all stockpiles, roadways, pits and refuse or waste areas to protect the surface owner's ongoing operations.
2. When affecting lands within 300 feet of an existing occupied dwelling, home, public building, church, community or institutional building, park or cemetery, see Section I D.
3. LQD recommends including hours and seasons of operations, routes of haulage, access routes, and estimated truck and vehicle traffic per route.

F. Mill and Tailings Disposal System. *(Note: Uranium operators may or may not choose to include the Mill and Tailings disposal areas within the Land Quality Division Permit Area Boundary)*

1. Ground surface preparation for construction.
 - a. Mill site.
 - b. Ore storage site.
2. Tailings disposal system.
 - a. Siting.
 - b. Stratigraphy and structure of tailings disposal site (show on geologic cross section).
 - c. Topsoil removal and storage.
 - d. Construction specifications for retention device. Include copy of Wyoming State Engineer's approval.
 - e. Maintenance and tailings management practices during operation.
 - f. Groundwater, surface water, and terrestrial monitoring plan with map.
 - g. Tailings dam seepage control.
3. Heap Leach pads.
 - a. Siting.
 - b. Stratigraphy and floor material character at leach site.
 - c. Construction specifications with cross-sections.
 - d. Leaching procedures and maintenance practices.
 - e. Seepage control.
4. Groundwater, surface water, and terrestrial monitoring plan with map.

IV. RECLAMATION PLAN

A. Postmining land uses.

1. Clearly list all postmining land uses.
2. If there is more than one land use proposed, the location and extent of each land use should be shown on a postmining land use map.

B. Contouring plan for affected lands.

1. Surface configuration consistent with postmining land use.
2. Affected lands blend with adjacent topography and land uses.
3. Erosion and sedimentation controlled.
4. Drainages re-established.
5. Acceptable slope conditions.
6. Postmining contour map to illustrate reclaimed land surface contour and configuration. Contours of the *native* topography for a one-half (½) mile periphery outside the permit area should be shown on the map. Contour intervals should be the same inside and outside the permit area. A contour interval of at least 10-feet is required for the reclaimed area. However, there may be some latitude with regard to contour interval depending on the nature of the local topography.

C. Surface preparation for topsoil or subsoil replacement.

D. Topsoil and/or subsoil replacement.

1. Methods of replacement.
2. Schedule for replacement.
3. Special soil reconstruction procedure.
4. Minimum depth of topsoil to be replaced on all affected land.
5. Erosion control and water conservation practices.
6. Soil amendments.

E. Revegetation practices (see Guideline No. 2)

1. Cover crops and/or mulch
 - a. Reasons for use.
 - b. Species to be seeded.

- c. Rate, method and time of seeding.
 - d. Type, amount and methods of applying and anchoring mulch.
2. Permanent seed mixtures.
 - a. Common and scientific names of species.
 - b. Rate for each species in pure live seed.
 - c. Methods of seeding.
 - d. Time of seeding.
 - e. Locations for seeding.
 3. Temporary seed mixtures.
 - a. Common and scientific names of species.
 - b. Rate for each species in pure live seed.
 - c. Methods of seeding.
 - d. Time of seeding.
 - e. Locations for seeding.
 4. Woody species transplants.
 - a. Number, type and age of species used.
 - b. Implanting methods.
 - c. Protection methods.
 5. Where different permanent mixtures will be seeded, delineate areas to be seeded with each mixture. If trees and shrubs are to be planted in localized areas these areas should also be delineated.
 6. Postmining husbandry practices.
 - a. Outline any proposed husbandry or land management practices.
 - b. Outline expected postmining grazing practices.
 7. Protection of newly seeded areas.
 - a. Type of protection proposed.
 - b. If fencing, describe type and location.
 - c. Criteria used to determine when protection will be removed.
 8. Methods for the evaluation of reclamation success (see Guideline No. 2).
 - a. Acknowledge revegetation success standards.
 - i. Equal % vegetation cover and % total cover.
 - ii. Equal herbaceous production.
 - iii. Species composition and species diversity capable of supporting postmining land uses.
 - iv. Ability to sustain defined grazing pressure.
 - v. Attainment of all of the above for the last two consecutive years of the bonding period.

- b. Specify use of Control Area, Reference Area or other LQD-approved evaluation concept.
- c. Specify quantitative and/or qualitative methods for estimating each parameter of (i) above.
- d. Specify methods for determining an adequate sample size and the statistical tests for comparing the quantitative vegetation parameters from (i) above.
- e. Specify methods for demonstrating that the reclaimed area is capable of withstanding grazing pressure.
- f. Specify methods for evaluating the suitable re-establishment of postmining wildlife habitat.

F. Final hydrologic restoration.

1. Final drainage system with maps and channel geometry.
2. Impoundments (*if applicable*).
3. Aquifer reconstruction/restoration and postmining monitoring land with map (*if applicable*).
4. Estimated final water quality and quantity.
5. Final anticipated piezometric surface(s) of affected areas (*if applicable*).
6. Drainage system for reclaimed land surface.
7. Postmining recharge restoration (*if applicable*).
8. Discussion of wetlands mitigation with map of reconstructed wetland locations (only if necessary, see D-10 description).
9. A discussion of impacts to the hydrology of the permit and adjacent area.

G. Special reclamation standards.

1. Facilities and utilities.
2. Roads, railroads, and transport facilities.
3. Other.

H. Decommissioning, stabilization, and reclamation of mill site and tailings disposal system.

I. Reclamation schedule. Annual progress of reclamation in accordance with Mine Sequence Map.

J. Reclamation costs. Assessment of costs for reclamation of all lands to be affected during the first year as if the mining operation were to stop at the end of this period. Itemize costs on a unit cost basis for the reclamation of the different types of disturbance, such as:

1. Pit areas.
2. Overburden and topsoil storage areas.
3. Mineral stockpiles and mill tailings areas.
4. Waste or refuse areas.
5. Embankments and impoundment basin.
6. Drainage conveyance and control structures.
7. Shop and mill areas.
8. Processing and shipping areas.
9. Access and haul roads.
10. Any other activity or facility which will require reclamation.

Note: Costs for Items a. through j., where applicable, should be based on replacement of overburden and topsoil materials or removal of surface facilities, grading and contouring, seedbed preparation,

stabilization, and seeding in accordance with the Reclamation Plan. The reclamation cost estimate should be concluded with a summation of all individual costs along with an estimate of total affected areas.

K. Public Nuisance and Safety

1. As required by W.S. § 35-11-406(b)(xiii), describe the procedures proposed to avoid constituting a public nuisance, endangering the public safety, human or animal life, property, wildlife and plant life in or adjacent to the permit area including a program of fencing all stockpiles, roadways, pits and refuse or waste areas to protect the surface owner's ongoing operations.

V. MAPS AND AERIAL PHOTOS

A. Maps

1. Title block located in lower right hand corner with the following information as a minimum:
 - a. Applicant's name and address.
 - b. Title of map.
 - c. Date map was drawn (*or date of photography, if based from aerial photo*).
 - d. Each date map was revised.
 - e. Map sheet page number, exhibit number, etc.
 - f. Scale and contour interval.
2. Section, township, and range lines and numbers.
3. North arrow.
4. Permit area clearly outlined and identified. Amendment areas should be clearly differentiated from original permit area and other amendment areas, clearly outlined, and identified on the Appendix C Map only. All should agree with written legal description in Appendix "C" of adjudication files.
5. Legend clearly describing information on map (all symbols and lines identified).
6. If only a portion of permit or amendment area is shown, a map location key showing area with respect to total permit or amendment area should be on map.
7. If more than one map sheet is used for a specific subject, each sheet would be numbered consecutively, 1 of 4, 2 of 4, etc.
8. Reference on the map any enlarged view, cross sections, or more detailed information contained elsewhere.
9. Contours.
 - a. Contour intervals should normally not exceed ten (10) feet, but will depend on the nature of topography in the area.
 - b. Contour intervals same for premining and postmining maps.

- c. Contour lines distinct and clearly identified.
10. Size of map sheets.
- a. Not extremely large or small.
 - b. Information and detail clearly shown.
 - c. Use a series of sheets if necessary.
11. Appendix A, B, C and E maps can be submitted at a scale of 1"=2000'. All other maps must be at a scale of 1"=1000' or greater (e.g., 1"=500'). To show greater detail, scales may be increased by even multiples of the original scale. For example, for a 1"=1000' scale map, detailed maps should be at 1"=500' or 1"=100'. Premine and postmine contour maps must be at the same scale and vegetation and soils maps must be at the same scale.

B. Aerial Photos

- 1. Should be current and show date taken.
- 2. Eliminate edge distortions on mosaics.
- 3. If used in place of map, should contain all information required for maps, otherwise items 1-6 for maps. Mylar overlays are desirable for small photos.

VI. GENERAL INFORMATION

The application, once approved, will constitute the enforcement or contractual document which the Department of Environmental Quality, Land Quality Division, will refer to during compliance inspections of the mining operation. The design of the Mine and Reclamation Plans must be based on site specific conditions. Where success of specific prescribed techniques is questionable, alternative actions should be discussed under the appropriate sections of the application.